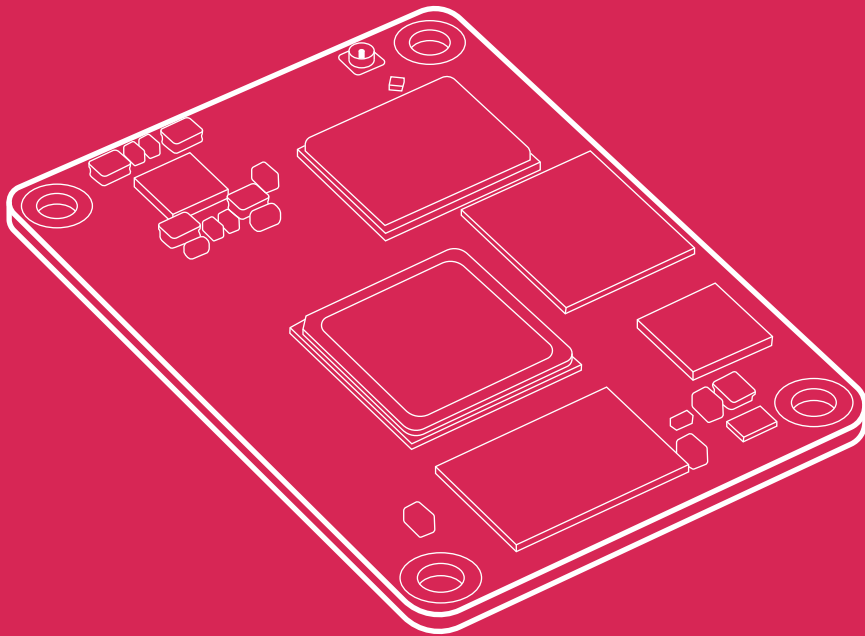




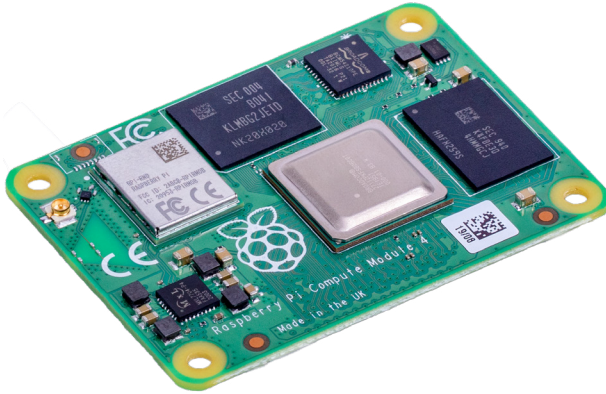
# Raspberry Pi Compute Module 4

Published May 2025



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## Overview



Raspberry Pi Compute Module 4 harnesses the compute power of the popular Raspberry Pi 4 Model B, bringing it to a smaller form factor suitable for integration into products.

Key features include a high-performance 64-bit quad-core processor, dual-display support at resolutions up to 4K, hardware video decode at up to 4Kp60, up to 8GB of RAM, Gigabit Ethernet, USB 2.0, dual camera interfaces, and PCIe Gen 2 x1 interface.

The optional dual-band 2.4/5.0GHz wireless LAN and Bluetooth 5.0 have modular compliance certification. This allows the board to be designed into end products with significantly reduced compliance testing, improving both cost and time to market. Either the onboard antenna or an external antenna kit can be used.

Compute Module 4 has optional onboard eMMC of 8GB, 16GB or 32GB.

A number of Compute Module 4 variants now come with an extended temperature range of -40°C to +85°C, ideal for handling applications in more extreme indoor and outdoor environments.

## Specification

<b>Form factor:</b>	55 mm × 40 mm
<b>Processor:</b>	Broadcom BCM2711 quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
<b>Memory:</b>	1GB, 2GB, 4GB or 8GB LPDDR4 (depending on variant)
<b>Connectivity:</b>	<ul style="list-style-type: none"><li>• Optional wireless LAN, 2.4GHz and 5.0GHz IEEE 802.11b/g/n/ac wireless, Bluetooth 5.0, BLE with onboard and external antenna options</li><li>• Onboard Gigabit Ethernet PHY supporting IEEE 1588</li><li>• 1 × USB 2.0 interface</li><li>• PCIe Gen 2 x1 interface</li><li>• 28 GPIO signals</li><li>• SD card interface for SD card or external eMMC (for use only with Compute Module 4 variants without eMMC)</li></ul>
<b>Video:</b>	<ul style="list-style-type: none"><li>• Dual HDMI interface (up to 4Kp60 supported)</li><li>• 2-lane MIPI DSI display interface</li><li>• 2-lane MIPI CSI camera interface</li><li>• 4-lane MIPI DSI display interface</li><li>• 4-lane MIPI CSI camera interface</li></ul>
<b>Multimedia:</b>	H.265 (4Kp60 decode); H.264 (1080p60 decode, 1080p30 encode); OpenGL ES 3.0 graphics
<b>Input power:</b>	5V DC
<b>Operating temperature:</b>	-20°C to +85°C -40°C to +85°C (extended temperature range variants only)
<b>MTBF<sup>1</sup> Ground Benign:</b>	377 000 hours (382 000 hours CM4 Lite)
<b>Production lifetime:</b>	Raspberry Pi Compute Module 4 will remain in production until at least January 2034
<b>Compliance:</b>	For a full list of local and regional product approvals, please visit <a href="http://pip.raspberrypi.com">pip.raspberrypi.com</a>

<sup>1</sup> Mean Time Between Failure

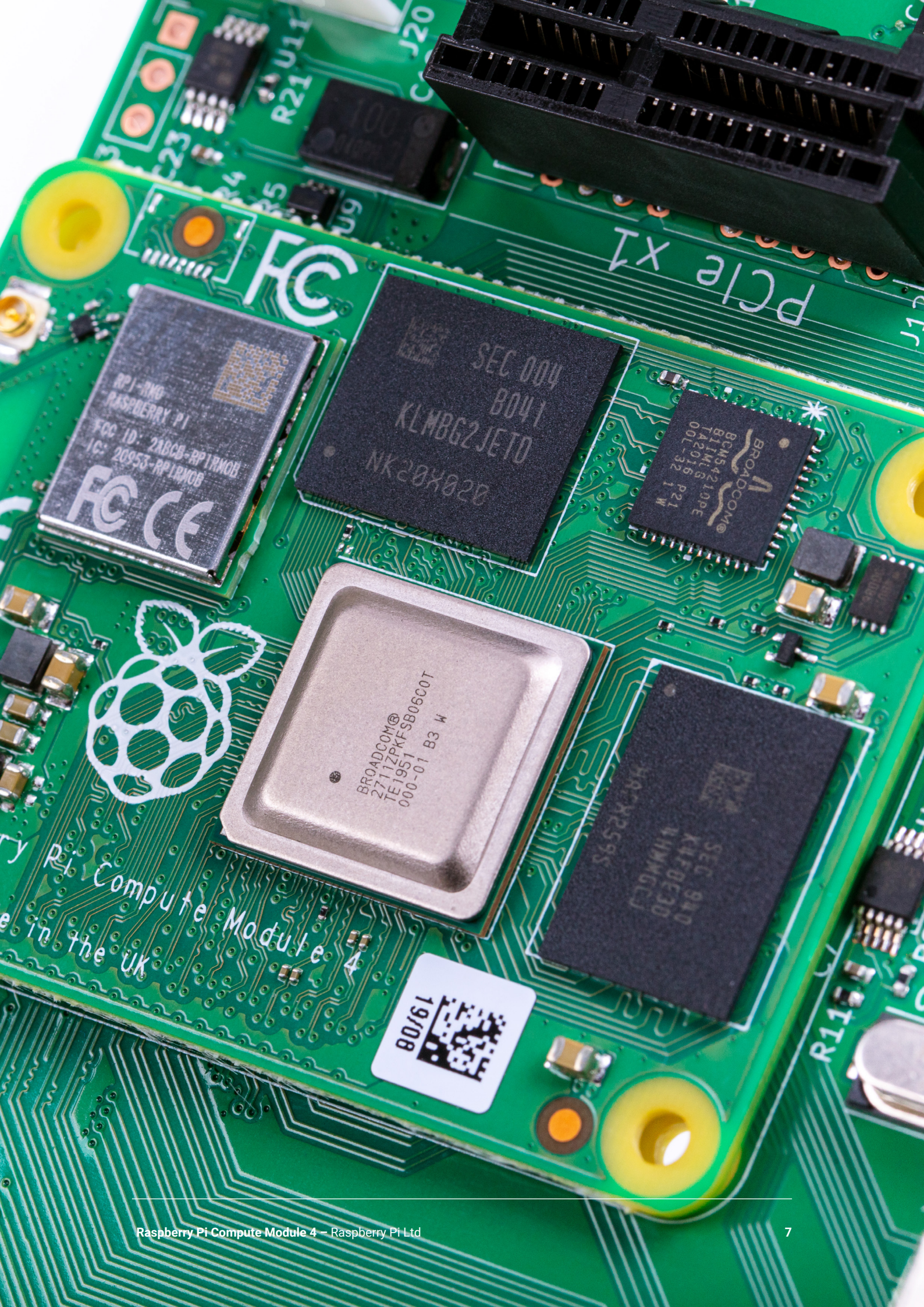


## Pricing

Part Number	Wireless	RAM	eMMC
CM4001000	No	1GB	0GB (Lite)
CM4001008			8GB
CM4001016			16GB
CM4001032			32GB
CM4002000		2GB	0GB (Lite)
CM4002008			8GB
CM4002016			16GB
CM4002032			32GB
CM4004000		4GB	0GB (Lite)
CM4004008			8GB
CM4004016			16GB
CM4004032			32GB
CM4008000		8GB	0GB (Lite)
CM4008008			8GB
CM4008016			16GB
CM4008032			32GB
CM4101000	Yes	1GB	0GB (Lite)
CM4101008			8GB
CM4101016			16GB
CM4101032			32GB
CM4102000		2GB	0GB (Lite)
CM4102008			8GB
CM4102016			16GB
CM4102032			32GB
CM4104000		4GB	0GB (Lite)
CM4104008			8GB
CM4104016			16GB
CM4104032			32GB
CM4108000		8GB	0GB (Lite)
CM4108008			8GB
CM4108016			16GB
CM4108032			32GB

## Extended temperature range variants

Part Number	Wireless	RAM	eMMC
CM4001000ET	No	1GB	0GB (Lite)
CM4001016ET			16GB
CM4002000ET		2GB	0GB (Lite)
CM4002016ET			16GB
CM4004000ET		4GB	0GB (Lite)
CM4004016ET			16GB
CM4101000ET	Yes	1GB	0GB (Lite)
CM4101016ET			16GB
CM4102000ET		2GB	0GB (Lite)
CM4102016ET			16GB
CM4104000ET		4GB	0GB (Lite)
CM4104016ET			16GB





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